

ABSTRACT

It is to provide a sol useful as a component of a hard coating agent to be applied on the surface of a plastic lens or useful for other applications, and its
5 production process.

A sol containing modified metal oxide particles which comprise, as nuclei, colloidal particles (A) being stannic oxide particles or composite particles comprising stannic oxide particles and zirconium oxide particles,
10 containing these oxides in a weight ratio of $ZrO_2:SnO_2$ of from 0:1 to 0.50:1 and having particle sizes of from 4 to 50 nm, and as a coating covering the surface of the nuclei, alkylamine-containing Sb_2O_5 colloidal particles, an oligomer thereof or a mixture thereof (B1), or
15 composite colloidal particles comprising diantimony pentaoxide and silica, an oligomer thereof or a mixture thereof (B2), in a weight ratio of (B)/(A) of from 0.01 to 0.50 based on the weights of the metal oxides, and have particle sizes of from 4.5 to 60 nm. A coating
20 composition containing a silicon-containing substance and the above particles. An optical element covered with the coating composition.